

that it is strictly terrestrial and digitigrade; while the powerful muscles of the loins indicate that, when going at speed, it probably moves by a succession of leaps. Mr. Krefftt supports these suggestions from actual observations. The stomach of the Cambridge specimen was unfortunately empty; but the food of the animal is no doubt similar to that of its allies, which are stated to feed exclusively on insects and ants.

2. On some new or rare Species of Chiroptera in the Collection of the Göttingen Museum. By G. E. DOBSON, M.A., M.B., &c.

[Received May 31, 1880.]

(Plate XLVI.)

To the kindness of Prof. Ehlers I owe the opportunity of examining the specimens of Chiroptera in the collection of the Göttingen Museum, among which I find some representing new or rare species. Of these by far the most remarkable is a specimen of a new species of *Megaderma* from Australia, for which, as it is more than double the size of any hitherto described species of that genus, I propose the name of

MEGADERMA GIGAS, n. sp. (Plate XLVI.)

In general structure externally agreeing very closely with *M. spasma*, but the relative proportions of parts are somewhat different. Thus the posterior lobe of the tragus, though similarly shaped, is proportionally shorter, while the anterior lobe is much broader at the base, more convex forwards, and obtuse at the tip; the nose-leaf also, though almost identical in shape, is not much larger than that of that species.

While in *M. spasma* the extremity of the second finger does not extend as far as the middle of the first phalanx of the third finger, in this species, as in *M. frons*, it extends beyond it. Tail rudimentary; two short vertebræ only project beyond the extremities of the ischiatic bones, and are quite concealed between the two layers of integument forming the base of the large interfemoral membrane.

The single specimen, an adult male, is very peculiarly coloured, somewhat like the specimen of *M. lyra* in the writer's collection previously described<sup>1</sup>. As in it, the general colour of the fur, ears, nose-leaf, and membranes is white, the base of the fur, upon the upper surface only, being pale slate-blue, the colour so characteristic of the genus: unlike the other known species, the extremity of the carpus, the thumb, and the membrane between the thumb and the second finger are clothed with short hairs, in the type specimen of a white colour.

The teeth scarcely differ in general form from those of *M. spasma*; but, as in the Ethiopian species of this genus, there is no minute

<sup>1</sup> Catal. Chiropt. Brit. Mus. p. 157.

upper premolar, and the dental formula therefore agrees with that of *M. frons*.

The rudimentary premaxillæ resemble more closely those of the Rhinolophidæ than those of any other species of *Megaderma*. As in that family, they project considerably beyond the line of the canines, from which they are also separated by a diastema on either side; and two small depressions in the gum may be seen, which appear to be the empty sockets of a pair of rudimentary teeth, occupying precisely the same relative position as in the species of Rhinolophidæ, an additional indication of the close affinity of the Nycteridæ to that family.

In the skull, as I have generally observed in the larger species of each genus, the sagittal crest is well developed, and the pair of ridges into which it divides in front are so strongly marked as to cause the frontal bones between them to appear considerably hollowed; these ridges terminate on each side in a blunt but well-marked postorbital process, which, however, as in *M. spasma*, is not perforated by a foramen (Plate XLVI. fig. *b*). In this respect, therefore, the skull agrees with that of *M. spasma*, which inhabits part of the same zoological region, though apparently agreeing more closely with *M. frons* and *M. cor* in the flattened and expanded frontals and in the absence of a minute upper premolar.

Length (of an adult male), head and body 5''·3; head 1''·9; nose-leaf 0''·6; ear 2''·2; tragus—anterior lobe 0''·45, posterior lobe 1''·0; forearm 4''·2; thumb 0''·8; second finger—metacarpal 3''·3, phalanx 0''·6; third finger—metacarp. 2''·7, 1st ph. 1''·85, 2nd ph. 3''·6; fourth finger—metacarp. 3''·1, 1st ph. 1''·0, 2nd ph. 1''·5; fifth finger—metacarp. 3''·3, 1st ph. 1''·25, 2nd ph. 1''·1; tibia 1''·7; calcaneum 1''·1; foot 1''·1.

*Hab.* Mount Margaret, Wilson's River, Central Queensland, Australia. (Captured by Mr. Wilson.)

This specimen, sent by Dr. Schuette to the Göttingen Museum, is the same as that mentioned by Mr. G. Krefft, C.M.Z.S., in a communication read before the Society in May 1879 (see P. Z. S. 1879, p. 386). It was accompanied by the following note on the colour of its fur and integuments:—

“Flughäute, Ohren, und Nasenblatt fleischfarbig. Alle Haare auf diesen Theilen weiss, auf dem Rücken sind die Haare bleifarbig. Die Haut welche die Ohren verbindet ist tief blutroth.”

#### RHINOLOPHUS PETERSI, Dobson.

An adult male from Sumatra, thus indicating the Oriental as the zoological region to which this species (of which the habitat was unknown) belongs. The only difference observable between this and the type specimen is that the free extremity of the tail does not project so far as in the latter.

#### VESPERUGO MAURUS, Blasius.

Two specimens in the collection must, I believe, be referred to this species, though they are said to have been received from localities many thousands of miles apart. One from Tuscany was sent to the

Göttingen Museum in 1847, by Prof. Savi, and was labelled by him "*Vespertilio savii*, Bonap."<sup>1</sup>; the other is stated to have come from a collection made by Degenhardt at Popayan in the U.S. of Columbia, South America, in 1844.

Neither in the general external form and in the dentition, nor in the relative measurements, have I been able to find the least difference of importance between these specimens, except such as depend upon the immature condition of that from Tuscany, which, as shown by the extremities of the finger-bones, had not attained its full size. The following are the measurements of these specimens:—

	Tuscany. inch.	Popayan. inch.
Length, head and body.....	1·7	1·8
„ head .....	0·63	0·65
„ tail .....	1·45	1·3
„ do. free from membrane .....	0·15	0·15
„ ear .....	0·5	0·5
„ tragus .....	0·2	0·2
„ forearm ..	1·3	1·3
„ thumb .....	0·2	0·2
„ third finger, metacarpal ..	1·15	1·15
„ „ „ 1st phalanx .....	0·4	0·45
„ „ „ 2nd phalanx ..	0·55	0·55
„ fifth finger, metacarpal..	1·1	1·1
„ „ „ 1st phalanx .....	0·28	0·3
„ „ „ 2nd phalanx .....	0·2	0·2
„ tibia .....	0·45	0·45
„ foot .....	0·22	0·22

As Blasius has remarked in his description of *V. maurus*, the first upper premolar is extremely small in both these specimens. In that from Tuscany I had considerable difficulty in finding it even with the aid of a lens. This at once accounts for Bonaparte's mistake when describing the dentition of *V. savii*.

<sup>1</sup> *Vespertilio savii*, Bonap., and the other species (*V. leucippe*, *V. aristippe*, *V. alcythoë*) described by Bonaparte (Fauna Italica, 1837), are not included by me in the 'Catal. Chiropt. Br. Mus.,' because, in the first place, I was unable to obtain an examination of the types, which appear to be in the possession of Mr. R. F. Tomes, and are noticed by him to have been in a very bad state when he received them from Prince Bonaparte in 1857 (see P. Z. S. 1858, p. 81), and, secondly, because the descriptions in the 'Fauna Italica' were quite insufficient to enable me to assign places to them in my work. Thus, had I followed Bonaparte's original, and Keyserling and Blasius's subsequent description (Wiegmann's Archiv, 1839, p. 317) of *V. savii*, that species must have been placed in the subgenus *Vesperus*; while *V. maurus*, Blas., which is evidently another name for the same species, would have appeared, as it rightly does, among the species of the subgenus *Vesperugo*. I say "evidently," for it appears quite clear to me that Prof. Savi knew the species with which his name had been associated, and sent a correctly named specimen (though not the type of the species) to the Göttingen Museum, which corresponds in all respects, except in dentition, with the descriptions referred to above. Nevertheless, I retain Blasius's name "*Vesperugo maurus*," given in 1853, in preference to Bonaparte's, as, for the reasons I have given, it is impossible to be absolutely sure that it is a synonym of *V. savii*.

The presence of a single specimen in a collection labelled "Popayan" is, of course, not sufficient grounds to extend the distribution of this species to the Neotropical Region, the Chiroptera of which (with one exception only, *Vesperugo serotinus*, as I have shown<sup>1</sup>) are quite distinct from those of any of the zoological regions of the eastern hemisphere. There are, however, in the same collection several other specimens of species, evidently Neotropical, which are labelled "Popayan" (to be referred to hereafter), and with which this specimen agrees precisely in the state of preservation. It is also noteworthy that *V. maurus* has been found in Europe at very high elevations only along the Alps; and in this respect the South-American habitat given agrees very well, for Popayan is situated in an elevated plain in the Andes, 6000 feet high.

If, then, specimens of this species have really come from such very distinct and distant zoological regions, and exhibit so few differences, it becomes evident that we must consider the Oriental representative of this species, described under the names *Vesperugo mordax*, Ptrs., and *V. austenianus*, Dobson, as a distinct species, which, although agreeing remarkably in general structure, and even in the colour of the fur, with *V. maurus*, differs in its conspicuously greater size (forearm 1''·6), in the very shallow emargination in the upper half of the outer margin of the ear-conch, in the considerably less degree in which the extremity of the tail projects from the interfemoral membrane, and in the much greater development of the first upper premolar, which, although the second premolar is also close to the canine, may be seen without difficulty from without.

#### VESPERTILIO NIGRICANS, Wied.

Two specimens referable to this species, one from Cordova, Argentine Republic, the other from Popayan, U.S. of Columbia. The latter, an adult male, has the forearm 1·5 inches long, and the digits proportionally longer, but in other respects quite agrees with specimens from other localities in which the forearm rarely exceeds 1·35 inch. Can it be that individuals of this and of other species inhabiting very elevated regions have larger wings to compensate for the very rarefied condition of the atmosphere?

#### SCHIZOSTOMA MEGALOTE, Gray. Popayan.

#### LONCHOGLOSSA WIEDI, Ptrs. Popayan.

The following are the measurements of an apparently adult male specimen preserved in alcohol (the zygomatic arches are cartilaginous):—

	inches.
Length, head and body . . . . .	2·5
„ head . . . . .	1·1
„ tail . . . . .	0·15
„ ear . . . . .	0·6

<sup>1</sup> Catal. Chiropt. Brit. Mus. p. 157.

